

Claims

- [c1] 1.A method for treating in a human patient a malignant skin lesion that preferentially accumulates a photoactivatable porphyrin, comprising administering to said human patient in need thereof an effective amount of a precursor of protoporphyrin IX thereby accumulating therapeutic levels of said protoporphyrin IX, and thereafter exposing said skin lesion to light capable of photoactivating said protoporphyrin IX.
- [c2] 2.A method for treating in a human patient a malignant hyperproliferative skin lesion that preferentially accumulates a photoactivatable porphyrin, comprising administering to said human patient in need thereof an effective amount of a precursor of protoporphyrin IX thereby accumulating therapeutic levels of said protoporphyrin IX, and thereafter exposing said skin lesion to light capable of photoactivating said protoporphyrin IX.
- [c3] 3.A method for detecting in a human patient a malignant skin lesion that preferentially accumulates a photoactivatable porphyrin, comprising administering to said human patient in need thereof an effective amount of a precursor of protoporphyrin IX thereby accumulating

therapeutic levels of said protoporphyrin IX, and thereafter exposing said skin lesion to light capable of photoactivating said protoporphyrin IX.

- [c4] 4.A method for detecting in a human patient a malignant hyperproliferative skin lesion that preferentially accumulates a photoactivatable porphyrin, comprising administering to said human patient in need thereof an effective amount of a precursor of protoporphyrin IX thereby accumulating therapeutic levels of said protoporphyrin IX, and thereafter exposing said skin lesion to light capable of photoactivating said protoporphyrin IX.
- [c5] 5.The method of any of claims 1–4, wherein said precursor is administered topically.
- [c6] 6.The method of any of claims 1–4, wherein said precursor is 5-aminolevulinic acid.
- [c7] 7.A method of treating a malignant skin lesion in a human patient in which protoporphyrin IX is produced from 5-aminolevulinic acid, comprising exposing said skin lesion in said human patient to a wavelength of light within the photoactivating spectrum of protoporphyrin IX.
- [c8] 8.The method of any of claims 1–4 or 7, wherein said wavelength of light is 350–640 nm.

- [c9] 9.The method of any of claims 1–4 or 7, wherein said wavelength of light is 600–700 nm.
- [c10] 10.The method of any of claims 1–4 or 7, wherein said skin lesion is basal cell carcinoma.
- [c11] 11.The method of any of claims 1–4 or 7, wherein said skin lesion is squamous cell carcinoma.
- [c12] 12.The method of any of claims 1–4 or 7, wherein said light is generated from an artificial light source.
- [c13] 13.The method of any of claims 1–4 or 7, wherein said light is only within the absorption spectrum of protoporphyrin IX.
- [c14] 14.The method of any of claims 1–4 or 7, wherein said photoactivating light is limited to the red and blue regions of the spectrum.
- [c15] 15.A photosensitizing treatment method for treating malignant lesions of the skin in a human patient comprising
 - (a)administering an agent which is not a photosensitizer but induces the synthesis of protoporphyrin IX in vivo and then
 - (b)exposing the lesions of the skin to a wavelength of light within the photoactivating spectrum of protoporphyrin IX.

phyrin IX.

- [c16] 16.The method of claim 15, wherein said agent induces synthesis of protoporphyrin IX in the heme biosynthetic pathway.
- [c17] 17.The method of claim 15, wherein said agent is a precursor of protoporphyrin IX.
- [c18] 18.The method of claim 15, wherein said wavelength of light is 350–640 nm.
- [c19] 19.The method of claim 15, wherein said wavelength of light is 600–700 nm.
- [c20] 20.The method of claim 15, wherein said agent is 5-amino levulinic acid.
- [c21] 21.The method of claim 15, wherein said agent is administered topically.
- [c22] 22.The method of claim 15, wherein said agent is administered systemically.
- [c23] 23.The method of claim 15, wherein said light is generated from an artificial light source.
- [c24] 24.The method of claim 15, wherein said light is only within the absorption spectrum of protoporphyrin IX.

[c25] 25.The method of claim 15, wherein said photoactivating light is limited to the red and blue regions of the spectrum.